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ABSTRACT

An analysis of policy options concerning teacher supply and demand in the A.C.T. [Australian Capital Territory] Schools Authority from 1981 to 1986 is presented. Projections have indicated declining demand for primary school teachers, fewer promotions in primary schools, and the necessity of relocating teachers to areas of expansion. However, comparatively higher annual replacement demand (20 percent) for teachers in the A.C.T. Schools Authority may relieve the initially dismal prognosis for teacher demand suggested by enrollment projections. Opportunities for promotion during this period are considered, and it is concluded that a "stationary state" in the aggregate demand for teachers need not imply stagnation in promotional opportunities for teachers. Primary teachers and principals are warned to be alert to, and prepared for, the necessity for large teacher redeployment among geographical regions within the A.C.T. The necessity for the geographic relocation of some primary and secondary school teachers generates pressure for immediate planning of alternative teacher resource utilization strategies. Policy options considered in this report include: permanent part-time employment for teachers; teacher exchanges; voluntary early retirement schemes; incentives for professional renewal programs; and the issue of voluntary versus compulsory teacher transfers. (Author/JD)

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Research Report

ED210265

TEACHER SUPPLY AND DEMAND IN THE ACT SCHOOLS AUTHORITY: IMPLICATIONS OF ENROLMENT PROJECTIONS 1981–1986

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Prepared by
Dr Geoffrey Burkhardt
for the
POLICY ANALYSIS SECTION
ACT SCHOOLS AUTHORITY

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FOREWORD

In recent years a number of issues associated with demand and supply of teachers have become of increasing interest to those concerned with education. In the A.C.T. such issues are of particular importance in view of the problems associated with declining and shifting enrolments. Support was provided by the Authority to enable Dr. Burkhardt to collect and analyse data that would be of value to those responsible for devising policies for management of problems likely to confront the Authority in the future. The analysis made by him will make a significant contribution, as it makes available new information, and provides valuable perspectives on a number of problems.

W.F. Donovan

W.F. Donovan
Acting Director, Planning Branch

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1. OBJECTIVES OF THE RESEARCH PAPER

The purposes of this Research Paper are:

(a) To identify the trends in the teacher demand projections in the context of the local market for teachers. This is undertaken through the application of a model of the local market.

(b) To identify the problems that may be associated with the trends and an analysis of the assumptions under which the trends were projected.

(c) To offer an analysis of policy options in respect of teacher supply in the A.C.T. Schools Authority, including those relating to opportunities for promotion and teacher appointment procedures.

Projected changes in primary and secondary school enrolments are analysed for their implication for:

1. Teacher promotion and appointment.
2. Teacher hiring policy.
3. Teacher tenure and conditions of leave.
4. Composition of teacher stock in terms of tenured/non-tenured balance, and full-time/part-time distribution.
5. Composition of teacher stock in terms of promotional positions and their availability.
6. Size of school establishments and nature of curriculum options.
7. Criteria for the selection and appointment of teachers.
8. Teacher mobility and loss rates.
9. Redeployment of teachers across geographical regions in the A.C.T.

The categories of policy options considered in this Research Paper include:

(a) Balance of part-time and full-time staff, job sharing and limited tenure proposals.

(b) Leave arrangements.

(c) Exchange and transfer arrangements.

(d) Availability of promotions positions in administrative, consultative and developmental areas.

(e) Promotion opportunities within support services.

(f) Utilization of Working Parties, Research Teams, and inter-school groups.

(g) Staff development schemes - scholarships, in-service opportunities; and implications of improvement in the quality of teacher stock.

(h) Retirement schemes.

(i) Procedural principles for the management of contraction.

(j) School amalgamations and/or closures - feasibility in terms of solving teacher supply and cost problems.

2. TRENDS IN TEACHER DEMAND PROJECTIONS

The basic data upon which the rationale for this Research Paper was initiated derived from the Summary of Statistics Projected Needs for Teachers in A.C.T. Government Schools 1980-1985, accompanying Minute Paper 20th October, 1980, and Information Paper: Projections of Future Needs for Teachers in A.C.T. Government Schools, Minute Paper 28th January, 1981.

The projections in the Minute Papers are based upon the most recent (1980 and 1981) enrolment projections for A.C.T. Government Schools for the period under review, calculated by applying the staffing formula to enrolments in individual schools as opposed to a projection of pupil enrolments prepared by the Territorial Policy and Co-ordination Branch of the Department of Education, based upon total pupil enrolment in the A.C.T. (February 1979).

The projections in the Minute Papers are stated as being based upon an assumption of the retention of the current staffing formula, and the opening of a selected number of new schools between 1982 and 1984.

It should be noted that the Teacher Demand Projections in the Minute Papers are statistics of Aggregate Demand in each section - Primary, High Schools and Secondary Colleges - and not Replacement Demand. This differentiation is important because Aggregate Demand projections take no account of the resignation rate and age cohort loss rate of teachers. Changes in these latter variables may indeed produce significant changes in the opportunities for promotion in the System, without any change being evident or necessary in the total or aggregate number of teachers demanded in a system.

It is not the task of this Report to project replacement demand for teachers during the period 1981-1985, but an awareness of the factors affecting Replacement Demand, as opposed to those influencing Total Demand is vitally important to any analysis of policy options in respect of items (a)-(i) on pages 1-2.

Factors which affect Total (Aggregate) Demand for teachers in a government system include:

Pupil enrolments

School staffing formula

Minimum/maximum school size policy

Rate of enrolment drift from government to non-government schools sector

Minimum class size policy and pupil/teacher ratio (if these are not already conventions included in Staff Formula).

The pupil enrolments in a government school system are influenced by:

(a) Changes in the age participation rate of the 15-18 age cohort. These rates in turn are often affected by changes in the national and regional economy, the level of unemployment, especially youth unemployment, and the changes in the state of job opportunities for this age group. (E.g., an economic boom, which leads to an increase in demand for unskilled and semi-skilled labour would affect the age participation rate of pupils aged 15-18.) Opportunities for tertiary education graduates may directly influence the school retention rates of 18 year-olds contemplating the economic costs and benefits of staying on to the end of year 12 in the hope of tertiary entrance.

(b) Changes in minimum school leaving age and minimum school starting age. A small change in either of these two variables will have a very great effect upon Aggregate Demand for teachers and this was exemplified when the United Kingdom Government increased minimum school leaving age from 15 to 16 in 1973-1974.

(c) Federal Government policies in respect of growth rates for Canberra. Demographic variables including birth rates and migration rates.

(d) Factors which affect Replacement Demand for teachers include all of the above, but in addition:

(i) Resignation rate of teachers.

(ii) Retirement rate of teachers.

(iii) Teacher secondment policy.

(iv) Teacher leave policies (including leave for study, accouchment leave provision, leave without pay policies).

(v) Rules and regulations governing teacher tenure (which affects mobility of "unsecured" sector of teacher stock in relation to its balance with tenured or "warranted" stock).

(vi) The sex composition of teacher stock.

While changes in (i) above affect Band I teachers more than older teachers in promotions positions, items (ii), (iii), (iv), (v) and (vi) are more likely to be of significance to teachers in promotions positions. Thus, any significant changes in conditions affecting items (ii)-(vi) will certainly affect the promotion opportunities for teachers caught in the promotional "log jam".

It is important to point out, at this stage, those areas over which system administrators have very limited policy options. While it is difficult for them to influence changes in item (i) resignation rates, they have considerably more administrative control over policies which could affect items (ii)-(vi). Later in this Report, attention will be directed to policy options related to each of these points specifically.

At this stage it is sufficient to emphasize the importance for teacher replacement demand (and implicitly for the creation of teacher promotional opportunities) of changes in resignation rates of teachers. It will be explained later that teacher resignation rates are significantly affected by changes in national economic variables and any projection of replacement demand or policies affecting promotional opportunity would be naive to ignore this fact.

Furthermore, since female teacher resignation rates are greater than for male teachers (see Table 16) the male/female balance in a projected teacher stock (see Table 2) is also a variable which will affect promotional opportunities at the margin. The differences in geographical mobility (regional internal mobility) of female teachers compared with male teachers is also significant for the changing distribution of promotional opportunity across a system. These aspects of demand will be examined later in terms of the constraint imposed by equal opportunity regulations.

Thus, the important issue for this Report which emerges from the above is that a <u>contraction or "stationary state" in total (aggregate) demand for teachers over the period 1981-1990 need not necessarily imply stagnation in promotional opportunities for teachers</u>. Changes in replacement demand, within Total Staff Ceilings may still generate opportunities of internal mobility and promotion.

Taking into consideration the factors and limitations discussed above, it is recommended that a plus or minus 5% margin be allowed for when interpreting the schedule of

projected needs for teachers in A.C.T. government schools to 1985. In the case of the aggregate demand for primary teachers, the most optimistic application of the marginal variation of 5% would still imply a reduction in the total demand for teachers from 1,044 in 1981 to 998 by 1986. At worst, the lower limit of primary needs could fall to 904 teachers by 1986.

PRIMARY SCHOOLS

Whether applying upper or lower marginal variations to the projected demand for primary teachers, such a reduction will not be spread evenly over all primary schools in the A.C.T., and the adjustment will of necessity involve redeployment of up to 20% of teachers from Northside, Woden Valley and Weston Creek primary schools, particularly to Tuggeranong and North Belconnen areas (based on regional projections Table 1 of Minute Papers). The promotional category most affected by this redeployment will be Band 4 teachers. The only factor likely to soften the effect of disproportional growth rates of Canberra suburbs is a rapid urban renewal program in Northside and Southside schools and/or "infill" programs in Woden Valley and Weston Creek.

Thus, the important understanding which arises from the interpretation of the primary teacher demand projection for 1985-1986, is that all primary teachers and principals should be alerted to and prepared for the necessity for large teacher redeployment among regions in the A.C.T. The Authority can take steps to soften the effects of this redeployment. Such a high level of internal teacher mobility in a system is extremely unsettling for pupils and parents, as well as for teachers, and thus, community awareness of the inevitability of this process needs to be generated, perhaps through School Boards, and other community-related outlets. The greater the amount of preparation for these changes, the less the insecurity and uncertainty experienced by teachers, parents and pupils in the regions most affected. Policy options dealing specifically with the "management" of contraction in some schools will be discussed in a later section of this Report.

HIGH SCHOOLS

While the aggregate demand for high school teachers (following Table 2 in 28/1/81 projection) indicates an increase of over 10% between 1980 and 1986, the regional distribution of teacher stock as shown in Table 2 indicates the necessity for redeployment of teachers from high schools in Northside and Southside to Tuggeranong and Belconnen area high schools particularly. Where the effects of this redeployment differ most from those in the primary sector, is that the greatest burden of redeployment will fall upon Band 1 teachers in the high school, not on Band 4 Principals as is the case in the primary schools.

It appears that there will be no need for redeployment of Band 2, 3 and 4 high school teachers within the period to

1986. (This assumes a decision not to close any Northside or Southside high schools. Closures will drastically affect the redeployment of high school teachers). The projections indicate that only 10 additional Band 2 positions, and only 6 additional Band 3 positions will be created in high schools between 1981 and 1986. It is important that the projection of this extremely low level of demand for additional high school promotions positions be communicated to teachers throughout the system to avoid their developing false expectations of their prospects for promotion within the system. It may be that many younger teachers in Band 2 and 3 positions, upon acceptance of this dismal prognosis for promotion, may in fact decide to leave Canberra in pursuit of promotions in other state and non-government schools. Such a development, if it occurred even marginally, would create an additional replacement demand for Band 2 and 3 teachers in the system, without having any increase in the aggregate demand for high school teachers.

SECONDARY COLLEGES

The projections for the Aggregate Demand for Secondary College teachers indicate little change in demand between 1981-1986. Regionally, a marginal increase in demand for teachers in Northside colleges is expected, compensated by a marginal decrease in demand for teachers in Southside colleges.

Factors that Could Affect Enrolment Projections in Colleges:

Three important factors could cause significant changes in the enrolment projections (and thus, teacher demand) for secondary colleges, making their enrolment projections more susceptible to marginal fluctuations than those for primary and high schools. They are:

1. The effect of expansion of T.A.F.E. courses in Woden, Canberra and Bruce T.A.F.E. Colleges, in both vocational and non-vocational areas. The relative attractiveness of T.A.F.E. evening and part-time courses for 15-18 year age cohorts may "poach" students directly from secondary colleges.

2. The establishment of an additional non-government 7-12 year high school (grammar school?) in the A.C.T. in 1983-1984. Also, if the Catholic systemic schools in the A.C.T. were to organize their own "secondary college" grouping by rationalizing the Year 11-12 groupings throughout their present high schools, it is inevitable they will retain some of their Year 11-12 students who might otherwise have left Catholic Year 10 classes to join government secondary colleges in Year 11. Oven a 10-year period, 1968-1978, the non-government schools suffered an "enrolment drift" to government schools, nationally. This drift has been reversed in the last 3 years and its effects have been particularly

noticeable in the A.C.T.

3. A fall in the age participation rate (enrolment and/or retention rate) of 15-18 age cohorts. The evidence of recent statistics indicates that we cannot expect a continuing increase in the propensity of the 15-18 year old age group to "stay on" and complete secondary schooling. The effects of economic recovery in the Australian economy may create additional job opportunities for this age group in the period to 1986. The tempo of the movement towards more part-time employment for youths may quicken and woo an increasing percentage of potential secondary college students away from a simple choice of "staying on" at school or total unemployment. The introduction of School to Work Transition Programs in schools may have important enrolment consequences for colleges.

Thus, any combination of the above variables may reduce the demand for secondary college teachers in the period to 1986. Of the three sectors, I believe we can be least certain about teacher need projections in the secondary colleges.

3. SUMMARY OF POLICY IMPLICATIONS THAT ARISE FROM TRENDS IN TEACHER DEMAND PROJECTIONS

Although upon superficial analysis three basic facts appear to emerge from the teacher demand projections (declining demand for primary school teachers, decline in promotions positions in primary school and the necessity to relocate teachers from geographical areas of contraction to areas of expansion) a more detailed analysis of mobility variables underlying the A.C.T. teacher stock indicates that the policy problems suggested in these projections may be averted or dissipated by the following developments:

A higher than expected replacement demand for teachers generated by:

(i) The continuation of above average resignation rates of teachers.

(ii) The continuation of comparatively high percentages of full-time teachers on leave of various types.

(iii) The effects of the C.E.R. Act voluntary early retirement scheme upon teachers in promotions positions.

Research into the resignation rates and mobility characteristics of A.C.T. teachers undertaken specifically for this Report is presented in later sections. It provides hard evidence supporting the ameliorating effects of (i), (ii) and (iii) above, upon currently perceived

problems of contraction and gives hope for a less dismal future for the A.C.T. Schools Authority in respect of teacher supply and demand policy.

With the implementation of policy options suggested in the latter section of this Research Paper, the mobility trends in the A.C.T. teacher stock detected in the research may be expected to generate potential teacher shortage conditions in some sectors in the A.C.T. before 1985.

The continuation of a teacher resignation rate of around 8%, a retirement rate of 1% (with introduction of early retirement schemes) and a continuation of full-time teacher leave levels at about 11% of stock, will perpetuate an annual replacement demand for teachers of approximately 20% of stock, or 450 teachers each year to 1986 at least. Although those on leave are not "lost" to the system, they cause appointment of replacement teachers during the period of their leave.

While not disregarding the optimistic tenor of the above, the following precautions should be noted:

1. The necessity to allow for ± 5% margin in projections.

2. The necessity to prepare primary teachers for expectations of extensive redeployment from old areas of Canberra to newer areas.

3. Urgent consideration of schemes to utilize primary Band 4 principals as identified schools contract to Band 3 principal size.

4. The need to alert School Boards and local parent groups of impending redeployment in those schools which will lose staff. These schools can be identified now. A concerted and urgent plan must be implemented to explain to teachers and parents in those schools the longer term prognosis for their schools, not just the expectations for next year.

5. All teachers in the Authority need to be impartially and unemotionally acquainted with the facts of declining promotional opportunity. A discussion of ways of achieving this follow in a later section of the Research Paper.

6. To avoid the possibility of redundancies in primary teacher stock, efforts should be made to encourage more primary teachers to transfer to high schools during the period, 1981-1986. A selected group of primary teachers could be given incentives to upgrade their qualifications to degree standard with inservice secondary method training courses, on condition that they will transfer to high schools on or before completion of their course. If 50 specially selected Band 1 primary teachers were chosen for this now, a great part of the "management of contraction" of primary schools

could be achieved with a minimum of redeployment problems.

7. The Schools Authority should anticipate a wider margin of error in its projection of the demand for secondary college teachers.

8. There is a need for an immediate survey of all teachers in the 50+ age cohort to determine how many may opt for early retirement at 55, given the opportunity under the Commonwealth Early Retirement Regulations.

4. A MODEL OF THE A.C.T. MARKET FOR GOVERNMENT TEACHERS AND ITS IMPLICATIONS FOR TEACHER DEMAND AND SUPPLY

Figure 1 illustrates the model of the market for A.C.T. teachers in terms of the exit ports for teachers in the government school sector. Figure 2 illustrates the model in terms of entry ports. The structure of A.C.T. government school sector is not unlike that for other state government systems, although until recently they recruited teachers through teacher education bonded scholarships, whereas the A.C.T. Schools Authority used "open market" operations to purchase applicant teachers from other states, sectors and countries, in addition to employing graduating Commonwealth Teaching Service Scholarship holders.

The great majority of Schools Authority teachers are classified in the "Warranted" sector. That is, they are full-time, permanently employed teachers - they have "tenure" for the purposes of this analysis. As at April 1981, 87.6% of teachers were in this category. Among the 12.4% of teachers classified here as "Unsecured" teachers, approximately 7% are part-time teachers, the remainder are full-time temporary teachers. The implication of the classification of teachers into warranted and unsecured categories becomes apparent when examining the longer term policy flexibility of the Authority to fine tune teacher supply to teacher demand in a contracting or steady state environment. An axiom of administrative policy in other state government departments of education has been that the smaller the percentage of government teacher stock in the unsecured sector, the more difficult it is for the Staffing and Planning Branch to make short-term rapid adjustments to meet unpredicted and unexpected shifts in enrolments. It is particularly important for the A.C.T. Schools Authority to ensure that an adequate basic percentage of its teacher stock remain in the unsecured sector to retain this flexibility of operation.

FIGURE 1

A.C.T. SCHOOLS AUTHORITY TEACHERS' MARKET MODEL - EXIT PORTS

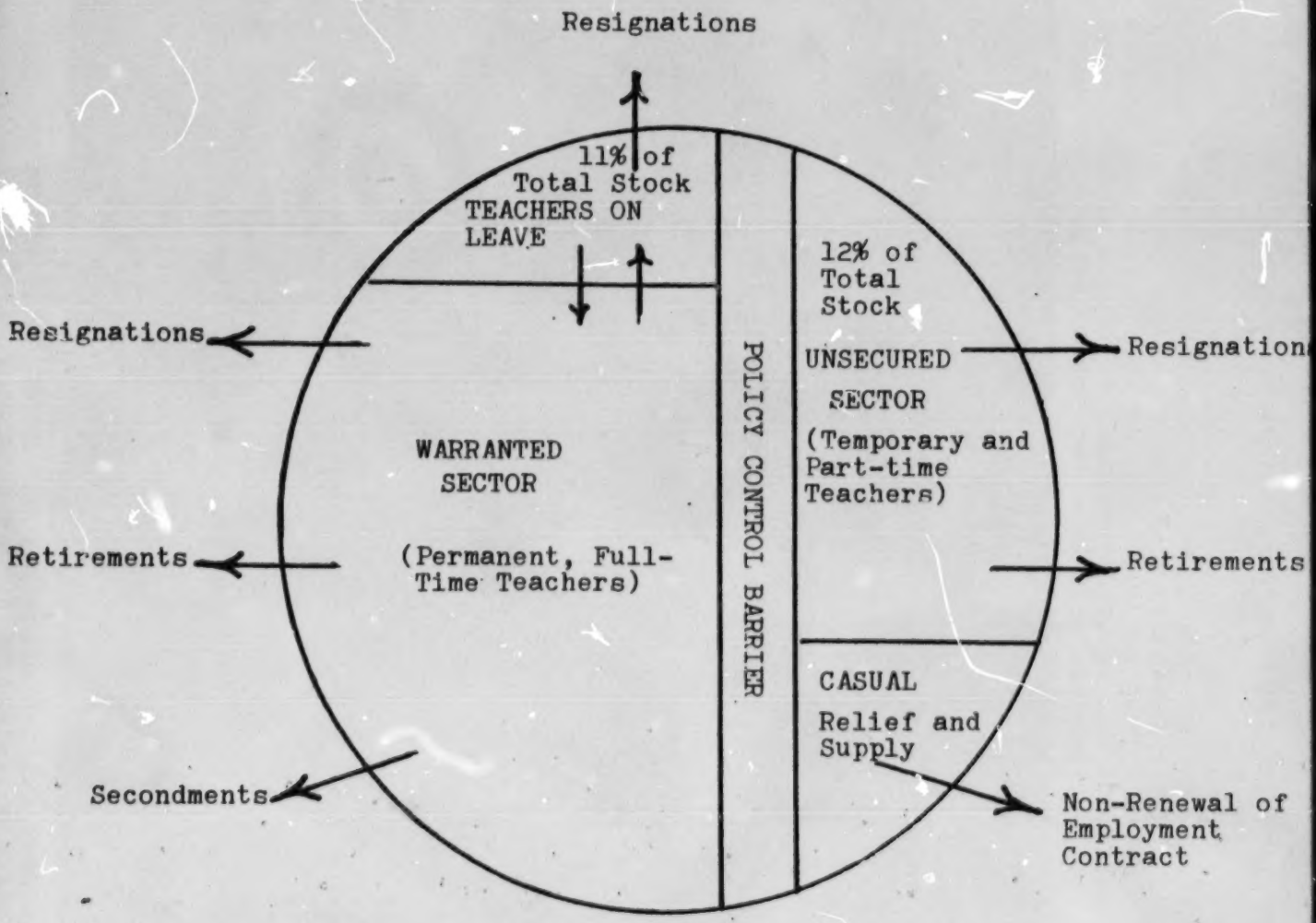
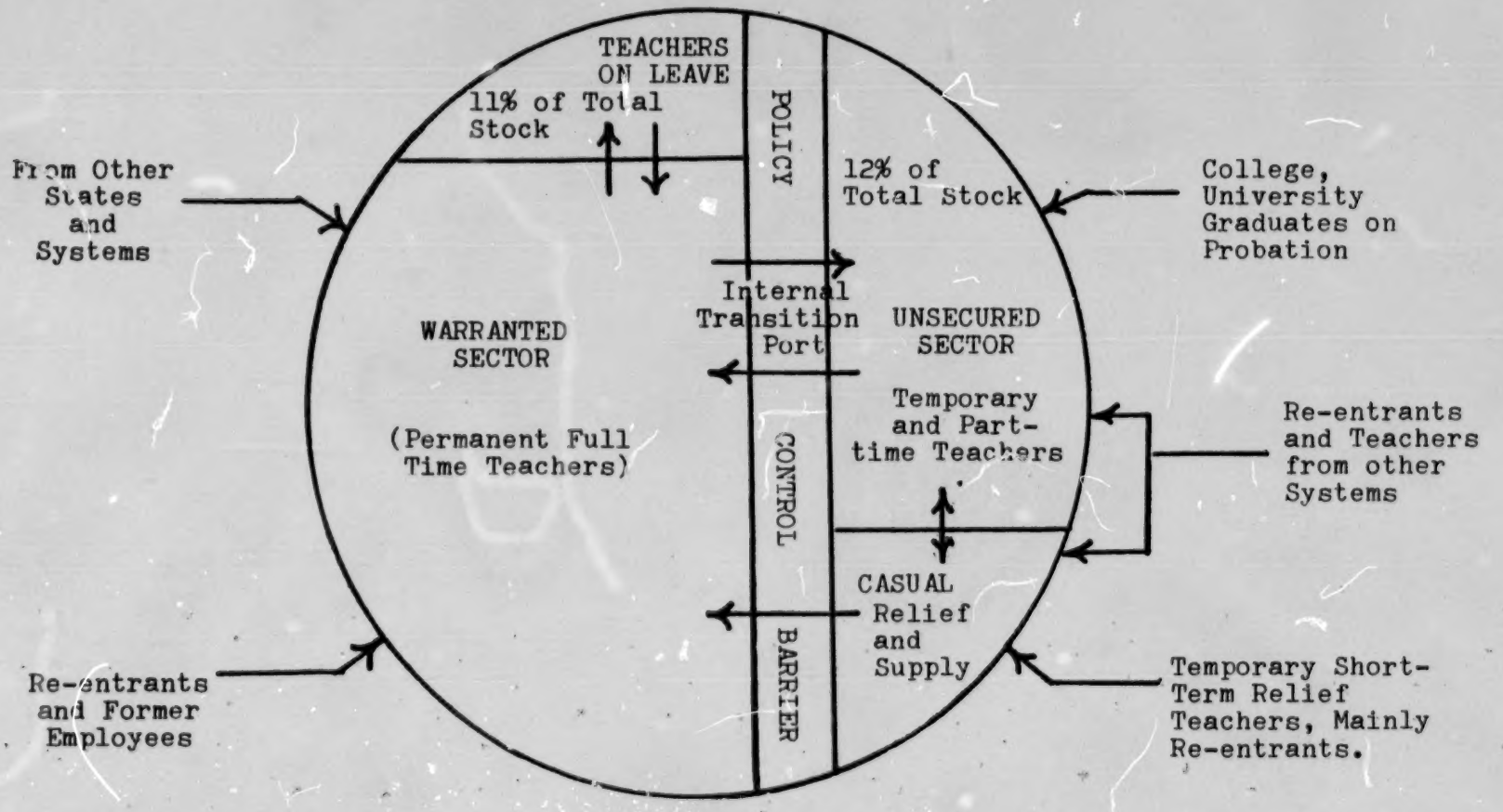


FIGURE 2

A.C.T. SCHOOLS AUTHORITY TEACHERS' MARKET MODEL - ENTRY PORTS



Research[1] has indicated that it is explicit policy in State government education departments to manipulate the relative sizes of the warranted and unsecured sectors to cope with short-term supply and demand fluctuations. While the manipulation of the relative sizes of the two sectors does not help solve the geographical immobility problems of teacher placement across the expanding and contracting regions of the A.C.T., it may ameliorate problems of aggregate supply and demand. Table 1 indicates the current (February 1981) disposition of teachers in the unsecured sector and includes full-time temporary teachers, in addition to part-time teachers, but excludes casual supply and relief teachers, although these are also part of the unsecured sector. Compared with statistics from other state government systems, the A.C.T. pattern is not unusual and there appears to be some margin for flexibility in the future. As would be expected, there is a much higher percentage of females in the unsecured sector than males. The high percentage of females in the A.C.T. teacher stock is fortuitous, because this group has a higher resignation rate than males, and normal mobility may provide some hope for easing the backlog of teachers in promotions positions in the future.

Table 2 compares the percentage of female teachers in the A.C.T. teacher stock with female teacher percentage rates in the other state systems. Female teacher stock as a proportion of total female stocks in primary and secondary divisions in the A.C.T. are significantly above those levels in N.S.W. and Victoria. This is particularly the case in A.C.T. primary schools. However, when these A.C.T. percentages are considered beside the age profile of the female teacher stock in the A.C.T. (Table 3), a significant percentage of females are in age groups where resignations for family/pregnancy reasons have significantly declined.

Only 19.8% are in the under-30 age group, that cohort which has the highest resignation rate for "family" reasons. A more detailed analysis of the staffing/supply implications

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1. Planning Branch, Education Department of Western Australia, Estimated Demand for Additional Teachers for Government Schools 1979-1989, Perth, April 1979, p. 5.
   "Each year the Education Department needs to employ a minimum number of re-entrants to allow flexibility for staff transfers at the beginning of each school year. In the past, staffing flexibility has been achieved by lapsing re-entrant teachers, particularly those employed late in the school year, thus creating vacancies for graduate entrants and for the transfer of permanent staff members."

TABLE 1

TEACHERS IN THE UNSECURED SECTOR AS PERCENTAGE OF ALL TEACHERS EMPLOYED BY A.C.T. SCHOOLS AUTHORITY FEBRUARY, 1981

Total % Unsecured (Included are part-time and temporary full-time)	12.4%
Males % Unsecured (as % of total Male Teachers)	6.5%
Females % Unsecured (as % of total Female Teachers)	16.3%
Secondary Teachers % Unsecured	10.7%
Primary Teachers % Unsecured	12.4%

Notes: These percentages have been calculated on totals which excluded full-time teachers on leave in April, 1981. A total of 331 full-time (Warranted) teachers was on leave and Unsecured teachers calculated as percentage of total teacher stock including full-time teachers on leave is 11.2%. Excludes short-term casual supply teachers.

TABLE 2

FEMALE TEACHERS AS PERCENTAGE OF TOTAL GOVERNMENT TEACHER STOCKS

Year	A.C.T.		Victoria		N.S.W.	
	Prim.	Sec.	Prim.	Sec.	Prim.	Sec.
1975	76.5	51.8	70.8	37.2	69.3	44.7
1978	76.7	50.9	68.9	44.2	69.5	43.4
1979	77.2	50.3	68.7	44.9	69.9	43.6
1981	77.2	49.4	n.a.		n.a.	

Source: A.B.S. Schools 1975-1979
A.C.T. Schools Authority Records.

TABLE 3

AGE PROFILE OF FEMALE TEACHER STOCK,
A.C.T. SCHOOLS AUTHORITY,
PERCENTAGE DISTRIBUTION, APRIL 1981

Age Group	% of Female Teachers in Age Group
20-29 years	19.8
30-39 years	44.7
40-49 years	25.4
50-59 years	7.4
Over 60 years	0.6
Age not stated	2.1
	100.0

Source: A.C.T. Schools Authority Records.

Note: Statistics include full-time female teachers on leave.

of the age profile of A.C.T. teacher stock will be presented in a later section of this research paper. However, it is important to note that research in the United Kingdom[2] in the 1970's showed that teachers in the under-35 age group had resignation rates four times that of teachers in the over-35 age group.

PART-TIME TEACHERS

The parameters of the model indicate that part-time teacher stock in the A.C.T. Schools Authority has fluctuated between 4.3% and 7.3% of total teacher stock during the last five years. This is indicated in Table 4 in which the percentage of part-time primary teachers appear to have increased significantly in 1980 to 10.8% of primary teacher stock. However, one suspects that from 1979-1980 a more accurate method of counting primary part-time teachers was used. From the viewpoint of the educational planner, this is a favourable development in terms of the "flexibility" argument advanced earlier in this report. More detailed statistics of part-time teachers are contained in the Appendix, where it appears from Appendix Table A , that 88% of all part-time teachers in the Authority in February 1981 were females. This is comparable with statistics from Victoria[3] where 89.7% of Victorian government primary part-time/temporary school teachers were female, and 76.5% part-time secondary teachers were female in 1978.

The aggregate distribution of part-time teachers in the A.C.T., compared with that in other state government systems, is shown in Table 5, which shows trends over the period 1976-1979. The 7.3% part-time stock level in A.C.T. government schools in 1980 places the A.C.T. at the median compared with other states. One of the major recommendations made at the conclusion of this research paper is the need for A.C.T. educational planners to ensure that the percentage of teachers in the part-time category do not fall below 7% of total stock in the future.

The staffing implications of a higher rather than lower percentage of teachers in part-time employment are that the schools will be required to tolerate a higher level of teacher turnover as part-timers normally have a higher turnover rate than full-time permanent teachers. However, this should not be a serious concern in the future.

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2. Department of Education and Science, "Teacher Turnover", Reports on Education, No. 79, May 1974, pp. 3-4.
3. Burkhardt, G.A., Teacher Supply Policies of State Government Departments of Education. Unpublished Ph.D. Thesis, University of New England, 1980, p. 193.

TABLE 4

FLUCTUATION IN PART-TIME TEACHERS (PRIMARY AND SECONDARY) AS PERCENTAGE OF TOTAL TEACHER STOCK, 1976-1980

Year	% Primary Part-time Teachers	% Secondary Part-time Teachers	% Total Part-time Teachers
1976	6.7	1.8	4.3
1977	6.7	1.7	4.3
1978	6.0	1.6	3.9
1979	6.0	2.0	4.0
1980	10.8	3.9	7.3

Notes: These statistics are calculated for part-time teachers only and exlude full-time temporary teachers.
Statistics excluded full-time teachers on leave when calculating part-time teachers as percentage of respective totals.

Sources: A.B.S. Schools, 1976-1979.
A.C.T. Schools Authority, 1980.

TABLE 5

PART-TIME TEACHERS AS PERCENTAGE OF TOTAL STOCKS A.C.T. GOVERNMENT TEACHERS COMPARED WITH SELECTED STATE GOVERNMENT TEACHER STOCK, 1976-1980

Year	A.C.T.	W.A.	N.S.W.	S.A.	Tas.
1976	4.3	6.7	6.1	5.6	18.0
1977	4.3	6.9	3.0	5.2	14.1
1978	3.9	8.6	3.3	7.2	16.7
1979	4.0	8.1	3.4	9.8	15.9
1980	7.3				

Source: A.B.S. Schools, 1976-1979 (calculated from aggregate tabulations).

TEMPORARY AND CASUAL TEACHERS

The 1981 statistics for the category of teachers shown as temporary and casual supply teachers are shown in Table 6. These totals are highly significant for future planning if the teachers counted in Table 6 are not all added into the total of long-term/part-time stock. For the purposes of the model in Figures 1 and 2, they become part of the unsecured sector. This group in Table 6 totals 784 persons or 21.4% of the total market stock of government teachers (when the 784 are added into total "official" stock of 2,881 in 1981.) However they constitute a much smaller group if calculated in E.F.T. terms. There may be a double counting error in the category, temporary full-time teachers, but even given this, the size of the "real" unsecured sector as opposed to the "official" unsecured sector is greatly and usefully increased. Herein lies the facility for short-term manipulation of teacher supply to meet rapidly changing enrolment fluctuations. This provision for a casual/supply facility must be retained, as a short-term "buffer" stock at all costs if the A.C.T. Schools Authority is to meet the needs of the late-1980s without encountering "inflexibility" constraints. Presumably, this casual teacher category can be expanded or contracted easily from term to term, provided adequate funding for this category of teacher usage continues to be planned for, requested and approved as an essential management feature of the teacher supply budgetting in the Authority.

ENTRY PORTS TO THE MARKET

The main ports of entry to the A.C.T. Schools Authority are shown in Figure 2. They are:

Entry of teachers from other states and school sectors.

Entry of new teachers direct from graduation at Teacher Education institutions.

Re-entrant teachers:

(a) In unsecured sector, part-time, casual and temporary teachers.

(b) Into warranted sector.

During the course of research for this paper, it was found that statistics of the origin of new entrants to the teacher stock each year was not kept by either the Schools Office or the C.T.S. Office. An analysis of the files of all A.C.T. Schools Authority teachers is currently being undertaken as part of this project but as all files need to be consulted individually, it will be some time before details are available. A special data form (Appendix 2) has been designed and is here suggested for use by the Authority to record all new entrants to the Authority as they enter. This file should be kept in addition to normally recorded information in teachers' individual files.

TABLE 6

TEMPORARY AND CASUAL SUPPLY TEACHERS - CASUAL AS OPPOSED TO LONG-TERM, PART-TIME, APRIL, 1981

Primary		Secondary		Total
Male	Female	Male	Female	
31	415	59	279	784

Source: Personnel Cards, A.C.T. Schools Authority.

Education planning will be greatly facilitated in the Authority if this basic record of teacher inflow is maintained.

A supplementary report on entry flows to the Schools Authority is currently being prepared. In addition to the source of new entrants and new re-entrants the supplementary report will also indicate the qualifications of the current teacher stock by band level and age.

EXIT PORTS FROM THE MARKET

The major categories of teacher losses through exit ports are shown in Figure 2, and include:

Resignations

Retirements

Deaths

Secondments

An important group of teachers, classified as still within the market, but not actually teaching, are those on full-time teaching on leave. In some state education departments they are shown as part of gross loss in the period in which their leave commences. However, since they have an entitlement to return to their employment with the Authority and hold established positions, they have been included here as part of the market model.

Teacher resignation rates for the Authority are shown in Table 8. The A.C.T. Schools Authority has experienced a higher aggregate resignation rate than other state education departments over the last few years, as shown in Table 9, which compares loss rates across state systems. It is reasonable to expect that resignation rates in the A.C.T. will continue to remain higher than many states when the reasons for resignation are examined. Table 10 indicates that 19.1% of all resignations are in the category "moving interstate or overseas". The large majority of the 37 teachers in this category in 1980-1981 were females. Added to the 10.8% of resignees whose reason for resignation was explicitly "moving to accompany spouse", it appears that approximately one-third of all teachers resign in Canberra for reasons related to the high mobility among the Public Service departments. This type of teacher motility is much more significant in Canberra than in other state systems. For example, a South Australian review of reasons for resignation,[4] undertaken in the 1970s,

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4. Sumner, R. J., A Study of Teacher Resignations in South Australia. Education Department of South Australia, Adelaide, 1972.

TABLE 7

A.C.T. SCHOOLS AUTHORITY - RESIGNATION RATES OF MALE AND FEMALE TEACHERS CALCULATED AS PERCENTAGE OF TOTAL MALE AND FEMALE STOCKS RESPECTIVELY

Year	Male	Female
1977-78	5.3%	12.1%
1978-79	3.6%	10.6%
1979-80	4.5%	11.3%
1980-81	3.8%	7.9%

Source: Percentages calculated from statistics in C.T.S. Office records.

Notes: Excludes teachers on leave and casual relief teachers.

TABLE 8

AGGREGATE RESIGNATION RATE OF TEACHERS
A.C.T. SCHOOLS AUTHORITY

Year	Resignation Rate Expressed as % of Total Primary and Secondary Teacher Stock %
1974	8.3
1975	6.9
1976	6.5
1977-1978	9.8
1978-1979	8.1
1979-1980	9.2
1980-1981 *	7.8

Note: Statistics for 1974, 75, 76 have been calculated on a calendar year basis and are derived from Third Progress Report to the A.C.T. Schools Authority on the Survey of Teacher Retention and Turnover in A.C.T. Schools 1973-1976.

Statistics for remainder of period, with exception of 1980-81, are calculated on July 1 - June 30 period, derived from C.T.S. Office.

* Statistics for 12 months, May 1980 - April 1981.

Excludes Teachers on leave

TABLE 9

TEACHERS GROSS LOSS RATES, A.C.T. SCHOOLS AUTHORITY COMPARED WITH OTHER STATES

(Primary and Secondary Teachers)

Year	A.C.T.	N.S.W.	Tas.	Qld.	W.A.	S.A.
1974	8.3	13.0	10.8	12.8	6.7	11.9
1975	6.9	10.6	10.7	11.1	6.0	9.8
1976	6.5	9.7	10.6	10.8	4.9	8.0
1977	9.8	8.7	9.0	11.2	4.3	6.5
1978	8.1	6.5	8.5	8.1	4.9	6.3

Sources: Annual Reports of Ministers of Education, C.T.S. Office, and Third Progress Report of Survey of Teacher Retention and Turnover, op. cit.

Note: For all states, the statistics are for Gross Loss (i.e., resignations and retirements).
For A.C.T., resignations only (retirements are insignificant).
For 1977 and 1978, statistics for A.C.T. are for 1977-78 and 1978-79, respectively.

TABLE 10

TEACHERS' RESIGNATIONS - STATED REASONS FOR RESIGNATION: MAY 1980 - MAY 1981

(Total Primary and Secondary)

Reason	Number	%
1. Leaving workforce	7	3.6
2. Other employment	22	11.3
3. Moving interstate or overseas	37	19.1
4. Travel	11	5.8
5. Moving to accompany spouse	21	10.8
6. Full-time study	7	3.6
7. Family commitment	35	18.0
8. Age	8	4.1
9. Ill health	8	4.1
10. Other (including no reason given)	38	19.6
	194	100.0

Excludes Teachers on leave

indicated that there, only 6.1% of resignations were for reasons of moving to accompany spouse, although a similar percentage of resignations were recorded as travel overseas and interstate.

The implications for future staffing and promotions of the higher general levels of resignation rates in Canberra, as a "Company town", indicates that planning for 1985 and beyond must acknowledge a higher replacement demand for teachers. If these higher turnover rates are sustained, they may help to alleviate the problem of teacher immobility and stagnation that would otherwise occur as a consequence of static pupil enrolments in the Authority as a whole.

When the statistics for resignations are related to age group, (Table 11), it is noted that the 20-29 year age group has the highest resignation rate (expressed as a percentage of the total of teachers in respective age group). This is not an unexpected finding. As the average age of the teaching force increases, its potential for resignation decreases. Teachers in promotions positions, or with promotion elegibility, are less likely to resign. Currently, in the A.C.T. Schools Authority, the largest number of resignations occur in the 30-39 year old age group (Table 12), principally because the majority of teachers in the A.C.T. Schools Authority are in this age bracket (1,367 out of 2,881 teachers - in 1981, 47.44%). Although this age group contributed 38.2% of resignations in 1980-1981, (Table 12), the resignation rate for that age cohort (calculated as a percentage of the total number of teachers in that group) was only 5.6%, compared with 7.38% for the 20-29 year age cohort (Table 11).

THE EFFECT OF ECONOMIC FACTORS UPON RESIGNATION RATES

Research[5] has indicated that in periods of national economic recession, teacher resignation rates decline, while in periods of national economic boom, teacher resignation rates increase, partly because of the loss of teachers to increasing graduate employment opportunities in other sectors of the labour market. The replacement demand for teachers in the A.C.T. Schools Authority in 1986 will be significantly affected by national economic fluctuations. However, teachers in the 20-29 year age group are more likely to be affected by economic fluctuations than older teachers in promotions categories. Other aspects of the male/female and primary/secondary characteristics of resignation rates will be discussed in a later section of this research paper.

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5. Burkhardt, G. A., The Economics of Educational Manpower, M.A. Hons. Thesis, University of New England, Armidale, 1970.

TABLE 11

TEACHER RESIGNATIONS - EXPRESSED AS PERCENTAGE OF RESPECTIVE AGE GROUP MAY 1980 - MAY 1981

(Total Primary and Secondary)

Age Group	Number of Resignations	Total Teachers in Age Group	Resignation Rate Expressed as % of Total in Group
20-29 Years	37	501	7.38%
30-39 Years	76	1,367	5.60%
40-49 Years	15	711	2.10%
50-59 Years	3	236	1.27%
Over 60 Years	10 *	20	50.00%*
Age not stated	58	46	not applicable
Total	199	2,881	

Notes: Statistics include 331 full-time teachers on leave.

* Resignations in this group should be regarded as retirements for compilation of gross loss rates.

TABLE 12

TEACHER RESIGNATIONS - MAY 1980 - MAY 1981

DISTRIBUTION BY AGE GROUP

(Total Primary and Secondary)

Age Group	Number of Resignations	%
20-29 Years	37	18.6
30-39 Years	76	38.2
40-49 Years	15	7.5
50-59 Years	3	1.5
Over 60 Years	10 *	5.0
Age Not Stated	58	29.2
	199	100.0

Note: Statistics in this category should be regarded as retirements for purposes of gross loss calculations.

FULL-TIME TEACHERS ON LEAVE

A disaggregation of full-time teachers on leave in April 1981 is shown in Table 13. Understandably, the majority of this total of 331 is comprised of female teachers - 294 - the majority of whom it is presumed are on accouchment leave. It is significant that 67.4% of teachers on leave are from the 30-39 year age category. Over two-thirds of all male teachers on leave belong to this age group also.

For a teaching authority to have 331 teachers of 2,881 (11.5%) of its official teacher stock on leave of various types, largely accouchment leave, seems rather high. Comparable statistics in this area from state government systems are not readily available but one explanation for this 11.5% leave contingent may be the comparatively large female composition of the A.C.T. teacher stock. Table 2 shows that 77.2% of A.C.T. primary teachers are female, compared with 68.7% in Victoria. One of the inevitable consequences of a large female teacher stock is higher accouchment leave numbers, in addition to higher aggregate gross loss rates. Some future benefits, at least, of this situation for 1986 may be more favourable prospects for teacher mobility and rejuvenation in the Authority as a consequence of higher replacement demand.

5. LONGER TERM IMPLICATIONS OF THE "STATIONARY STATE" CONDITION IN EDUCATION SYSTEMS

The phenomenon of declining enrolments, teacher surpluses and contracting promotions opportunities has attracted the attention of education planners and researchers in a number of countries during the last decade. In the United States and the United Kingdom, falling enrolments have been a characteristic of many School Board Districts and Local Education Authorities respectively since the early 1970s. The Department of Education and Science, London, in its series, Reports on Education,[6] alerted its planners to the impending implications of enrolment declines during 1974 and 1975. In Australia, early warnings of falling enrolments were implicit in 1974 and 1975 statistics of decreases in school age cohorts entering the primary school, yet, at the time of the publication of the Borrie Report,[7] in which Australian population projections for the turn of the century were revised downward from 20 millions to 17 millions, Australian universities, teachers' colleges and colleges of advanced education were enrolling record numbers of teacher

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6. Department of Education and Science, Reports on Education, No. 78, "The Supply of Teachers", July 1973; No. 80, "Pupil and Teacher Numbers", December 1974; No. 82, "Teachers for the 1980s", March 1975; No. 85, "The Future School Population", June 1976.
7. First Report of the National Population Enquiry, Population and Australia, Canberra, A.G.P.S., 1975.

TABLE 13

FULL-TIME TEACHERS ON LEAVE - PRIMARY AND SECONDARY
APRIL 1981.

Age Group	Male	Female	Total	%
20-29 Years	3	57	60	18.1
30-39 Years	27	196	223	67.4
40-49 Years	3	31	34	10.3
50-59 Years	3	10	13	3.9
Over 60 Years	1	-	1	0.3
TOTAL	37	294	331	100.0%

education students. This mismatch in the balance of projected teacher supply with projected teacher demand was caused partly as a consequence of time lags and planning lags implicit in the system of teacher education in this country, and partly because in the mid-1970s the economy entered a recession which affected teacher resignation rates in a way quite unexpected by education department administrators. (It was however not unexpected by some education researchers who, in the late-1960s, predicted this possibility through an analysis of the relationship between teacher resignation rates and economic fluctuations). At the national level, the Commission on Advanced Education initiated research reviews and projections of pupil enrolments[8] in February 1977, and not long after the Australian Education Council published its projections.[9] By the end of the 1970s all Australian state education departments had intensified their review and research of teacher supply and demand projections, and enrolment predictions. It is important to note that it took at least five years from the first statistical evidence of declining enrolments in Australia to the time that the first policy initiatives of state departments of education in restraining teacher supply became effective. The length of this policy response lag in respect of fine tuning teacher supply to teacher demand should be well noted by present educational planners in the 1980s.

Although all state education departments published teacher supply and demand projections in the late-1970s, I will refer here only to two of them, the N.S.W. Report (May 1979) Supply of and Demand for Teachers,[10] and the Western Australian Departmental Working Paper, Estimated Demand for Additional Teachers for Government Schools 1979-1989,[11] because these two reports approached the problem of enrolment fluctuations not only from the viewpoint of reducing teachers-in-training, but also from the viewpoint of possible variations in the composition and utilization of their existing teacher stock. It is these latter factors that should be the focus of attention for A.C.T. educational planners.

A controversial, unpublished Report[12] on policy implications of school enrolment changes in Australia was recently prepared for the Australian Education Council. In addition to its consideration of teacher supply and demand projections,

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8. Commission on Advanced Education, Teacher Supply and Demand, unpublished departmental paper, February 1977.
9. Australian Education Council, The Supply of and Demand for Teachers in Australian Primary and Secondary Schools 1978-85, Report of the Australian Education Council Working Party, Canberra, A.G.P.S., 1978.
10. N.S.W. Department of Education, Supply of and Demand for Teachers, Sydney, May 1979.
11. Education Department of Western Australia, Estimated Demand for Additional Teachers for Government Schools 1979-1989. Perth, April 1979.
12. The Changing Patterns of School Enrolment and Their Implications for Educational Policy and Management - Report prepared for Australian Education Council, unpublished.

this report canvassed per pupil costs in relation to school size, school closures and amalgamations and teacher tenure. The Australian Teachers' Federation was strongly critical of the approach, limitations and suggestions of the report and in Circular No. 29/81[13] listed specific criticisms.

The A.C.T. Education Authority is in the fortunate market position of being small enough to buy most of its replacement teachers (new teachers and re-entrants) directly from the open market without having to concern itself with the training/supply function. However, the nature of the "teacher resource mix" and the intensity of utilization of its teacher stock, together with the alternative combinations within the teacher stock, should become major areas of study and experimentation by A.C.T. planners. Specific aspects of the "resource mix" include:

(a) Policies regarding the most desirable balance between full-time and part-time teachers to allow maximum flexibility in staffing and promotion.

(b) The optimum percentage of teacher stock that might be allowed on full-time leave, part-time leave, leave without pay.

(c) The optimum percentage of teacher stock that might comprise the casual/supply pool upon which the Authority can draw at peak periods of demand.

(d) The mobility of full-time and part-time teachers among schools in the Authority.

(e) The sex composition of the teacher stock and implications for resignation rates, and leave.

(f) The optimum age distribution of a teacher stock for the first decade of the 21st Century.

(g) The alleviation of the promotions positions log jam through experiments with variables and policies affecting levels of teacher satisfaction and morale.

Perhaps the best theoretical analysis of the system-wide implications of enrolment declines and the "steady state" system is that expounded by Taylor[14] in a highly acclaimed paper, Managing Contraction. He considers the "gains" and

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13. Australian Teachers' Federation, Circular 29/81, Canberra, April 1981.
14. Taylor, William, Managing Contraction, paper read at the Fourth International Intervisitation Program in Educational Administration, Canada, 1978.

"losses"to an education authority of the consequences of a higher average age of the teacher stock and a lower resignation rate among teachers, an increasing percentage of whom are frustrated at promotional barriers. He lists the gains as:

(a) Experience: Headmasters can get to know and to balance the strengths and weaknesses of their staffs.

(b) Stability and Loyalty: Long serving staff build up loyalties to the school,"form more cohesive working groups and provide each other with more effective mutual support."[15]

(c) Effective Training: School focussed inservice education will be more effective in schools where there is stability and continuity of staff.

(d) Continuity: Continuity of staff in a school ensures that newcomers to the staff will obtain a more suitable and effective induction to teaching by virtue of the accrued experience of the staff.

Against these benefits of experience, maturity and continuity, Taylor lists the disadvantages of an ageing teaching profession:

(a) Insularity: A diminishing proportion of staff with experience of the world beyond the classroom.

(b) Inflexibility: Taylor argues that older teachers are more conservative, less innovative and "likely to stick with their old and tried methods even when these have been shown to be ineffective."[16]

(c) Frustration of Ambition and Expectations: Greater competition for promotions produce frustration and embitterment.

(d) Lower Morale of Teachers: Taylor argues that entrepreneurial and adventurous teachers will have fewer outlets for their talents and their levels of satisfaction will decline.

(e) High Cost of Early Retirement Schemes: An expensive early retirement scheme, designed to "unblock promotion and create new opportunities for younger teachers, may prove too expensive for many systems.

(f) The Management of the Inept: There is less teacher mobility in an ageing teaching profession. Taylor

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15. Taylor, W., op. cit., p. 16.
16. Taylor, W., op. cit., p. 15.

argues the inept are those most likely to stay put, "while their more energetic and successful colleagues move on."

How likely is the A.C.T. Schools Authority to suffer the disadvantages and consequences that Taylor suggests may occur in a system with a higher average aged teacher stock and lower mobility?

Two facts are fairly certain for the A.C.T. school system in the late-1980s:

(a) The average age of teachers will increase significantly if we accept the evidence of the age profile statistics, and the pupil enrolment projections for the A.C.T. to 1986.

(b) Teacher mobility will decrease marginally for no other reason than an increasing percentage of teachers in the teacher stock will move into age cohorts with lower resignation rates.

Given these above limitations, are there any circumstances peculiar to the A.C.T. that make Taylor's compendium of system-wide problems less applicable to the A.C.T. than in other systems?

Four factors would affect changes in mobility and the promotions "log jam" but the liklihood of their occurring in the current political and economic environment is very low. Nevertheless, they should not be dismissed entirely:

(a) A more favourable staffing formula, particularly in respect of administrative loads for Band 3's.

(b) A further agreed reduction in pupil/teacher ratios and minimum class sizes.

(c) Legislation for an increase in the minimum school leaving age from 15 to 16.

(d) Government policy causing a rapid increase in Canberra's population growth.

While each or any combination of these factors would temporarily alleviate the "stagnation" and immobility problems, without positive policies, they do not solve the basic system-wide effects of stability and immobility upon teacher morale and teacher effectiveness. For these reasons, it is assumed for the purposes of this Research Paper, that none of the above events occur in the ensuing decade. This may be unrealistic in the light of possible political changes, but for purposes of exploring policy options designed to cope with the underlying effects of stability, it is one set of necessary planning assumptions.

POLICY IMPLICATIONS OF TAYLOR'S STEADY STATE PROBLEMS:

1. A teacher stock need not necessarily suffer insularity, simply because it is ageing and less mobile. Policies may be implemented to promote mobility. A program of teacher exchanges could be introduced so that for one year in every seven or eight, each teacher in Bands 2 and 3 may be given and encouraged to take the opportunity of exchange with teachers and instructors:

(i) in other schools of the Authority;

(ii) in other Australian states;

(iii) in overseas countries;

(iv) in T.A.F.E. institutions;

(v) in large industries and commercial enterprises.

While it would probably not be possible for the Authority to fully fund the travel costs involved with this policy, it may be possible to come to an agreement with the Taxation Department to allow travel costs and associated expenses incurred by the teachers on exchange to be an allowable taxation deducation. It would be probably unwise to have more than 7% of teacher stock on exchange at any one time.

Opportunities could also be given to teachers to move, on exchange, from secondary school to T.A.F.E. colleges for a minimum period of a term and up to a year. The advantage of this scheme would be to increase the relationship between those two sectors and promote a deeper understanding on the part of both groups of teachers of the "School to Work" transition issues.

Classroom to shopfloor exchanges might be arranged in those sectors of industry and commerce where "training officer" situations can be exploited (e.g., large industries and multinationals which have their own "leisure courses" and "health classes" and worker education groups as part of their staff development programs).

2. Inflexibility of older teachers and disinclination towards innovativeness may be countered by policies fostering professional renewal. Although inservice courses will contribute towards professional renewal, by themselves they may not necessarily overcome teacher ineffectiveness. The Auchmuty Report[17] emphasizes that teacher development is a continuous process:

"New graduates will comprise as little as 6% of the teaching force in 1985. In other words,

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17. Report of the National Inquiry into Teacher Education. A.G.P.S., Canberra, 1980, p. 68.

by the mid-1980s, 94% of teachers will already be in a school system at the beginning of each year, and any further improvement in the quality of teaching will depend substantially on their experience of further professional development."[18]

In a comprehensive diagram, the Auchmuty Report describes a wide variety of teacher development programs ranging from formal award inservice courses involving full-time leave for teachers to attend, through non-award short-term courses, such as five-day conferences, vacation schools, school-based programs, to informal inservice education, including work experience in industry and commerce, work with community organizations and home-school liaison programs.

The important point about professional renewal is that it should be planned by the Authority as a continuous and varied program, throughout the teaching life of each teacher. A teacher of five years' experience may require an entirely different development program than he/she would need after having taught for 25 years in the system.

The paramount feature of any life long professional development program is that teachers be induced to accept their ongoing need for and participation in renewal programs of various types suitable to their experience, age, specialization and level of responsibility at different stages during their career.

The first task of the Authority is to mount a campaign to educate existing teachers towards this expectation. Such a strategy can never succeed without first seeking and gaining the support of the Teachers' Federation, involving that group directly in planning and management of the wide varieties of alternative programs, courses and experiences available to a teacher during a 25-30 year career. A variety of alternative schedules might be set out. A few examples are contained in Appendix 1. A 30-year career span is considered a minimum time span.

Evidence from the Auchmuty Report indicates that teachers are willing to participate in various forms of professional renewal programs, (e.g., 54% of a large sample of teachers in 1977-1978 indicated that they had attended at least one non-award program related to school curriculum).

The costs of the various programs would need to be carefully budgetted by an education authority over a long term, gaining government acceptance of a long-term commitment to it as a necessary feature of the educational administration of their school system. The financial feasibility of professional renewal programs will be discussed in a later stage of this Research Paper.

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18. ibid.

The Auchmuty Report recommendations favoured the voluntary participation of teachers in inservice programs. I would strongly recommend that planned, structured participation in professional renewal programs become an accepted feature of a long-term career in the A.C.T. Schools Authority. While favouring the suggestion that teacher certification or registration should not be for life, but for a specified period only, certain difficulties might be encountered in its implementation. Monetary incentives, I believe, provide a strong motivation towards continual professional development and may need to be offered to ensure the support of teachers' unions in this program. Governments and education authorities need to be educated to accept that teacher renewal and teacher effectiveness cannot be had cheaply. Long-term financial planning of these programs is necessary. A wide variety of short-term and long-term leave situations will need to be covered by the employment of a sufficiently adequate teacher stock to cope with the task.

A most comprehensive review and report on inservice programs for teachers in Western European countries is contained in the Council of Europe publication, Research and Reform in Teacher Education.[19] The varieties of programs and schemes reported is too extensive to usefully comment upon here, but I urge the A.C.T. Schools Authority Inservice Education Committee to note well the substance of Chapter 9 of this publication of the Council of Europe, edited by Taylor.

3. The third malaise of the "steady state" system, frustration of ambition and expectations, is a much more difficult factor to counteract through policy initiatives in an education authority. The core of the problem is one of maximizing teacher satisfaction, or alternatively, preventing dissatisfaction among teachers from becoming widespread. However, reduced opportunity for promotion is only one factor contributing towards dissatisfaction. On the positive side, factors which maximize teacher satisfaction are found to include: recognition, self esteem, professional autonomy, trust and responsibility, participation in decision making, achievement and advancement, and the nature of the job itself.

Sergiovanni's[20] research on job satisfaction among teachers lists these factors as satisfiers, to be generated as far as possible through the climate of the working environment, because they are the most significant motivators of workers. Factors (or hygienes) which cause dissatisfaction among workers include: adverse interpersonal relationships with subordinates, superiors and peers; aspects of supervision; adverse working conditions; aspects of administrative policy and management.

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19. Taylor, William, Research and Reform in Teacher Education. Council of Europe, N.F.E.R. Publishing Company, Windsor, 1978.
20. Sergiovanni, T., "Factors which Affect Satisfaction and Dissatisfaction of Teachers", Journal of Educational Administration, No. 5, 1967.

The policy implications of the research into teacher satisfaction suggest the development of school climates which confer upon teachers a heightened sense of professional autonomy, responsibility and encouragement. A reduction in the amount of bureaucratic administrivia is required. Teachers should be led by their principals to regard themselves as a group of collegiate decision makers, rather than as employees who are decision takers. Teacher satisfaction and morale is an issue squarely in the domain of the school principal. The way to attack this problem is through a professional development program (compulsory) for all school principals. This could be conducted through a series of professional principals' conferences, to be run and organized by principals' associations, with the help of Authority staff, specialists, and teachers' union officials. The principals must feel the need for this type of development in terms of the urgency of avoiding deteriorating teacher morale in a "non-promotion" school system. These conferences (a better suited name for them than inservice courses) might focus upon: the causes of teacher dissatisfaction; evidences of teacher dissatisfaction; new approaches to school climate; open and autonomous professional climates; relationships between leadership style, school climate and teacher satisfaction.

There are ways of rewarding entrepreneurial and innovative teachers other than through promotion. They may be given an increased responsibility in the management of the school. They may be seconded (with day release from school) to advisory and research teams in the Schools Office. An expansion of the percentage of "master teachers" in the Authority staff establishment may be one way of avoiding dissatisfaction among Band 1 and Band 2 teachers. Leave on full pay incentives may be used under certain circumstances to reward teachers who wish to pursue their projects and innovations further.

Teachers draw a great deal of job satisfaction from the nature of the work itself. A scheme to capitalize on this understanding might be implemented where teachers are given special time allowances to work with parent groups in the community and other community agencies. The area of parental and community involvement in school affairs is wide open for experiment and development. The School Board development in the A.C.T. has only scratched the surface of parent involvement. It is only on the administrative end of the schooling process, not on the pedagogical end of the process. There is great scope for structured "parental education" programs on such issues as children's reading development; special education problems; physical education in the school; the social education of the child; the parents and their co-operate responsibility with the school for career education.

A satisfying and challenging task for an enterprising teacher, given classroom release, would be the generation of a program for parents, focussing upon aspects of the type suggested.

The role of the school, its teachers and parents in the

treatment of community-wide problems should not be ignored. Problems such as unemployment, drug abuse, public health, aged and incapacitated people, etc., could be the focus of an initiative from a team of teachers in a school, who are given the responsibility of developing a school role in these issues. The wider role of the school as a social agency in the community affords many challenging opportunities guaranteed to generate teacher satisfaction, in addition to forging closer links between school and community. Firstly, however, principals must begin to see their schools as agencies for educating the community (informally) in addition to educating its children. The role of the school teacher as a community educator, as well as a child educator, should be explored by principals and teacher educators in conjunction with parent and community groups. Given financial support from local government and community groups, this role could be an exciting one for a school to develop. It would provide many opportunities for teachers to exercise all those activities which maximize job satisfaction. As a side effect, such a program may also enhance the public image and esteem of the teaching profession which has taken such a battering recently.

4. Early Retirement Schemes: The application of the C.E.R. Act to A.C.T. teachers holds out some hope of alleviating pressures at promotions barriers. To be successful, an early retirement scheme must be voluntary, not forced, must be financially attractive to teachers aged 50-60, and, most importantly, must have the support of the teachers' unions.

There is limited evidence to suggest that early retirement at 55 would be welcomed by a small, but significant, number of Band 3 and 4 teachers in the A.C.T.

To more accurately gauge the popularity and effect of the proposed early retirement scheme upon promotions positions, this Research Paper strongly urges an immediate survey of all teachers aged 50-60, and all Band 3 and 4 teachers if they are not included in this age group. This survey should seek their current preferences and intentions about early retirement under the new scheme. Full details of the application of the scheme and its options should be provided to enable teachers to consider its possibilities for them.

5. Teacher Effectiveness: The term which Taylor uses to encounter the problem of teacher effectiveness in an ageing teacher stock, is "the management of the inept". To avoid a teacher stock from becoming less efficient as a consequence of its average age, policies might be implemented to maximize opportunities for the maintenance of a high level of mental and physical health of older teachers and those in promotions positions. While the previously discussed professional development scheme is one way to approach this problem it is reasonable to assume that teachers in good mental and physical health are likely to be more effective than those who do not enjoy this state. By making it compulsory for teachers to take long service leave when it is first due , the Schools Authority may initiate a first step in countering the problem of inefficiency due to age.

More opportunities for principals and assistant principals to meet and exchange ideas and problems is a positive way of countering administrative inefficiency. The Schools Authority has made a good start on this policy over the last few years, but could develop it further on a more planned, structured basis, generating in every principal and assistant principal an expectation of continual and systematic meetings of various types. The role and function of Principals' Associations, Research Groups, Administration Associations, etc., should be actively and positively encouraged by the Schools Authority.

Every effort and incentive should be provided by the Authority to ensure principals and assistant principals participate widely in as many of these types of meetings and associations as possible. A condition of promotion to assistant principal and principal should be a personal undertaking by the applicant for promotion to commit himself widely to this type of professional interaction.

6. THE FEASIBILITY OF SELECTED STRATEGIES AND POLICIES RELATING TO TEACHER SUPPLY AND DEMAND PROJECTIONS

PERMANENT PART-TIME EMPLOYMENT

Experiments with permanent part-time employment for a limited group of teachers is suggested as one means of alleviating the potential oversupply of primary Band 1 teachers, if that should occur.

The feasibility of this scheme will depend on the following factors:

(a) Satisfactory arrangements regarding superannuation and other entitlements currently enjoyed by permanent staff. The Teachers' Federation will need to be assured of these arrangements.

(b) The ability of a school to cope with an increasing number of part-timers. Some school principals have expressed reservations about the extent to which a school can absorb part-timers, whether permanent or temporary. The upper limit of part-timers should not exceed 10% of total school staff at any point, otherwise the administrative and extra-curricular duties burden falls too heavily on permanent full-time staff.

(c) Teachers should not be forced into a permanent part-time place from their positions of permanent full-time teachers.

(d) Opportunities should be made available to permanent teachers to voluntarily move to permanent part-time positions and then to move back into full-time work should their circumstances change.

(e) It would be unwise to permit beginning teachers the

opportunity of permanent part-time employment.

A survey conducted by the Teachers' Federation indicated teachers favoured the idea of permanent part-time, given some of the limitations listed above. It has been suggested that older teachers, not seeking promotion to Band 3 or Band 4, may be interested in permanent part-time work. If so, this sould take some pressure off the promotions bottleneck.

CONTINUED USE OF CASUAL/SUPPLY TEMPORARY TEACHERS

It is important that the Schools Authority maintain a pool of casual/supply teachers to meet short-term needs. This is vital to the flexibility of the system to "fine tune" teacher supply to demand and is accepted policy in all state education departments. To better control and manage the use of this category of teacher in the "unsecured" sector of the market, the following suggestions are tendered:

(a) All casual/supply teachers be identified firstly in terms of the school that they wish to be "on call" for most of the time.

(b) Each school identify a sufficient range of casual teachers as to enable it to cover most of its curriculum needs in short-fall situations.

(c) Casual teachers continue to be given the opportunity to become full-time temporary if conditions permit - i.e., they be able to move into and out of the unsecured sector of the market.

(d) Accurate statistics of the number, qualifications, specializations and annual usage of casual teachers be recorded each year by each school and forwarded to a central record section in the Planning Branch of the Authority. This will give planners a better perception of total teacher market resources available, in addition to "official stock", and will help long-term budgetting.

UTILIZATION OF POTENTIALLY REDUNDANT BAND 4 PRIMARY PRINCIPALS

While the evidence of this Research Paper indicates that resignations, leave and retirements may alleviate the problem of redundant primary Band 1 teachers, the major urgent problem relates to the creative utilization of between 6 and 10 Band 4 primary principals during the next few years. The following schemes are thought to be feasible:

(a) Use of primary Band 4 principals as consultants. Teams of 3 or 4 Band 4 principals could be formed to tackle special tasks such as curriculum revision, assessment review, school amalgamation guidelines.

(b) Their use in the inservice education branch should be considered.

(c) The concept of rotation of specially selected Band 4 primary principals among these consultative roles and tasks may give the opportunity for some principals to undertake full-time study leave, long service leave, overseas exchanges, etc. In any year it could be possible that 10% of all Band 4 principals be involved in non-school "developmental positions". The composition of this pool will change from year to year. Special training could be provided in evaluation, supervision, planning, and system management areas for principals in this pool to increase their administrative expertise and usefulness to the system as a whole, as well as to schools specifically.

EXCHANGES FOR BAND 2 AND 3 PRIMARY PRINCIPALS

Both of these strategies are feasible if they can be continued and developed as a more normal expectation of teachers in the Authority. The following types of exchanges should be explored as a way of alleviating the possible redundancy of primary teachers in promotions positions.

(a) Voluntary retraining and transfer to secondary schools and college promotions positions - leave for inservice/upgrading courses should be provided for a selected group well before redundancy occurs.

(b) Voluntary transfer to or exchange with T.A.F.E. teachers in the non-vocational further education subjects in T.A.F.E. The demand for T.A.F.E. teachers is very high and will continue so. Given the opportunity, some primary Band 2 and 3 teachers may consider a transfer to T.A.F.E. under agreeable retraining conditions.

To assist the voluntary transfer of primary Band 2 and 3 teachers, as suggested in (a) and (b) above, an immediate "future staffing alternatives" program should be started in those schools identified as being most vulnerable to losing Band 2 and 3 teachers. The opportunity for discussion, information exchange and trial schemes with teachers most likely to be affected should be taken as soon as possible. It may be useful to appoint a primary Band 4 teacher to the task of managing and planning such a "staffing alternatives" campaign as soon as possible.

LIMITED TENURE

Contrary to widespread opinion in other state government education systems, I do not see the introduction of limited tenure schemes as being either feasible or necessary. If the Authority continues to experience the higher resignation rates, and leave rates than other state education systems, then there may be no necessity to consider limited tenure schemes.

The continued utilization of a high percentage of temporary, casual supply and part-time teachers obviates the

need for limited tenure schemes. Provided sufficient flexibility is preserved in the size of the unsecured sector of the market, together with the facility for flows between the warranted and unsecured sector, Teachers' Union resistance need not be courted over limited tenure proposals.

VOLUNTARY EARLY RETIREMENT SCHEMES

As discussed earlier, voluntary early retirement schemes at age 55 under new Commonwealth Employees Regulations may relieve some pressure on promotions positions. It is suggested here that an immediate survey of teachers in the 50+ age group be conducted to find out how many teachers may be interested in voluntary early retirement, and when they may think of retiring under the new regulations. The conduct of such a survey may be a useful and absorbing task for a Band 4 primary principal. Statistics from Table 14 of this Research Paper indicate that approximately 250 full-time teachers of the Authority are currently in the 50+ age cohort, 19 of them over 60. In five years' time, the size of this 50+ age group will double, and by 1990, will almost treble, under existing (past) retirement regulations. If the early retirement scheme proves popular, up to 2% of the teacher stock may be lost annually by 1990 (60 per year) through this exit port.

INCENTIVES FOR PROFESSIONAL RENEWAL PROGRAMS AND THE PROBLEM OF TEACHER MORALE

The history of inservice and professional development programs has been one of voluntary participation by teachers and it is suggested here that it remain so. To force compulsory retraining and inservice programs upon teachers does not appear feasible, given current teachers' union attitudes and the introduction of a "fading certificate" as a means of forcing inservice training, may so alienate teachers and teachers' unions that the whole concept of Professional Renewal may be rejected and resisted for decades. To penalize teachers for not involving themselves in such programs is negative and self-defeating. While the intrinsic satisfaction gained from voluntary inservice programs is often its own reward, efforts should be made to offer incentives to teachers engaging in long-term planned professional renewal programs. They may take a number of forms. The feasibility of such schemes depends on finance being available to mount these long-term programs.

(a) Additional short-term and long-term leave opportunities.

(b) Additional exchange opportunities, involving travel support for overseas and interstate exchanges.

(c) Involvement in decision making and policy planning activities.

(d) Opportunities for relieving/acting positions in promotional bands.

TABLE 14

AGE PROFILE OF TEACHER STOCK - MALE/FEMALE

(Primary, Secondary and On Leave)

Age Group	Male			Female			Totals		
	Prim.	Sec.	Leave	Prim.	Sec.	Leave	Prim.	Sec.	Leave
20-29 Years	31	91	3	175	144	57	206	235	60
30-39 Years	134	360	27	357	293	196	491	653	223
40-49 Years	73	154	3	294	156	31	367	310	34
50-59 Years	38	54	3	82	49	10	120	103	13
Over 60 Years	2	6	1	10	1	-	12	7	1
Age Unknown	-	7	-	25	14	-	25	21	-
TOTALS	278	672	37	943	657	294	1,221	1,329	331

(e) Funding for travel to professional interstate conferences.

(f) Clerical and research assistance to teachers whose professional development program involves them in a research project or a school or pupil survey.

(g) Grants of special curriculum resources and equipment for schools which run a school-based professional renewal program around a specific project in which all its teachers are involved.

The extension and expansion of professional development programs in the A.C.T. Schools Authority is seen to be a vital and urgent issue in the maintenance of teacher morale and teacher satisfaction. More efforts should be made to encourage each school to generate and mount its own professional renewal program around an issue or problem peculiar to its community setting, or its curriculum emphasis. All principals may first need to be inducted into the need for and scope of such programs. A greater effort should be made by the Authority to involve more Principals in "leadership" programs if school based professional renewal programs are to be successful.

To determine what percentage of the teacher stock is potentially receptive to the upgrading of formal qualifications, a survey of teacher qualifications should be conducted, followed up by a canvass of teachers affected; inquiry of the types of inservice opportunities and courses they may seek; and the types available in the areas of teachers' interest.

THE PROBLEM OF TEACHER TRANSFERS AND THE GEOGRAPHICAL DISTRIBUTION OF TEACHERS REQUIRED IN 1986.

Although primary teachers will be most affected by the necessity for the geographical relocation of teachers, all teachers and schools in the Authority should be involved in a public relations program and preparing schools and teachers for the implications of declining enrolments, amalgamations and closures, if they are shown to be inevitable.

Information and reassurance are the most successful instruments in reducing teacher tensions and anxieties associated with closures and amalgamations. If teachers can be certain in their own minds that they will not necessarily become redundant, that they will have opportunities and time for readjustments and relocation, then much of the potential conflict over these issues may be avoided.

This information and discussion exercise should be planned to start at least 18 months prior to the actual closure/amalgamation. Teachers likely to be affected should be given a wide variety of options to consider - e.g., transfer to a selection of schools; special leave arrangements; secondment to special Schools Office research/study teams; upgrading inservice courses and a possible selection of teacher exchange choices.

Voluntary v. Compulsory Transfers

The above options for teachers in contracting schools should be explored first with each teacher as a means of encouraging voluntary transfer. If sufficient lead time is planned, the majority of teachers affected will avoid having to be considered for compulsory transfer. If compulsory transfer cannot be avoided, the Schools Authority should carefully consider the policy of the A.C.T. Teachers' Federation in respect of compulsory transfers (A.C.T.T.F. Members' Handbook, p. 63). Their policy appears reasonable and feasible. It is important to emphasise that their policy does include, as one of its criteria for compulsory transfer, the needs of the school.

I suggest that if it does not already exist, a Consultative Committee on Teacher Transfers should be set up urgently consisting of 2 members from Executive of A.C.T.T.F. and 2 members from the Schools Office to advise the C.E.O. on specific transfer issues, as they arise. The whole process of a geographical relocation of teacher stock across schools in the Authority cannot hope to be achieved successfully without the full assistance and co-operation of the A.C.T.T.F. It is important that the high level of professional expertise in the A.C.T.T.F. be recognized by the Authority and utilized in the joint solution of educational planning problems.

7. RESIGNATION RATES AND AGE PROFILES - SOME POSSIBLE FUTURES

In many school systems, the unpredictable nature of teachers' resignation rates make teacher supply and demand projections most difficult. Details of age profiles, however, provide education planners with more certainty about future projections.

The resignation statistics in Tables 15,16,17 of this Research Paper indicate that A.C.T. educational planners can be certain about some variables.

(a) The comparatively high percentage of resignations occurring for reason, "accompanying spouse on transfer to other state/district", can be assumed to be a permanent feature of the public service orientation of Canberra. For this reason, A.C.T. Schools Authority teacher resignation rates will continue to remain higher than in most other states, despite the nature of the national labour market for graduates.

(b) The comparatively higher percentage of females in the A.C.T. teacher stock (Table 2) will be another factor contributing to higher resignation rates in the A.C.T. than in other government systems of education.

Operating concurrently, these two variables can be confidently expected to generate an 8%-10% replacement demand for teachers in the Schools Authority for the next two decades

TABLE 15

TEACHER RESIGNATIONS - ALL REASONS

	Primary			Secondary		
	Male	Female	Total	Male	Female	Total
July 1977 - June 1978	18	108	126	30	97	127
July 1978 - June 1979	10	100	110	23	76	99
July 1979 - June 1980	10	97	107	32	98	130
July 1980 - May 1981	11	67	78	26	60	86

TABLE 16

MALE AND FEMALE TEACHER RESIGNATION RATES OF A.C.T. SCHOOLS AUTHORITY TEACHERS COMPARED WITH THOSE IN OTHER STATE GOVERNMENT EDUCATION DEPARTMENTS FOR THE YEAR 1977

State	Female Resignation Rate %	Male Resignation Rate %
Queensland	14.7	7.7
New South Wales	10.9	5.8
Western Australia	5.5	2.9
Tasmania	11.6	5.2
South Australia	8.0	4.2
Australian Capital Territory	12.1	5.3

Source: Annual Reports of Ministers of Education; and Records in C.T.S. Office (A.C.T.)

TABLE 17

RESIGNATION RATES FOR PRIMARY AND SECONDARY SCHOOL TEACHERS, RESPECTIVELY A.C.T. SCHOOLS AUTHORITY

	Primary Teachers	Secondary Teachers
1977-78	9.5%	10.1%
1978-79	8.4%	7.8%
1979-80	8.2%	10.1%
1980-81	7.6%	8.6%

Source: C.T.S. Office.

Note: Calculated on totals which exclude full-time teachers on leave.

1980-81 for 12 months, May, 1980 - April, 1981.

at least, during times of economic recessions. During periods of economic boom, when all national markets for graduate labour bid teachers away from their profession, replacement demand might be expected to increase to its old 1969-1974 levels of 12%-14% per annum.

One important variable that might be expected to cause a downward pressure on resignation rates, is the gradual ageing of the stock. The age/resignation statistics in Table 11 show that the older the average age of the stock, the lower its resignation potential. However, the full effect of this variable may well be countered by the fact that public service transfers do not necessarily affect spouses of teachers in the 20-30 age group more than spouses of teachers in the older age groups. Another countervailing factor is that as the average age of the teacher stock increases, so its retirement rate increases. Given early voluntary retirement schemes in the A.C.T., and the pressure of other variables above, I see no reason to vary my projection of the limits of annual replacement demand falling between a minimum of 8% and maximum of 14% during the next two decades.

8. CONCLUSIONS

The effects of comparatively higher annual replacement demand for teachers in the A.C.T. Schools Authority may relieve the initially dismal prognosis for teacher demand suggested by enrolment projections and teacher demand forecasts. While the issue of potential redundancies for primary Band 1 teachers may not now appear to be as serious, because of high resignation rates, the problem of utilizing potentially surplus primary Band 4 teachers and other primary teachers in promotions positions is one that the Authority must act upon urgently. This Paper has suggested a number of alternatives that might be considered for their effective utilization.

The important point which emerges in respect of the necessity for the geographical relocation of some primary and secondary teachers is the need for immediate planning of alternative teacher resource utilization strategies, together with wide consultation and discussions with teachers and school communities most likely to be affected. I would suggest that the recently established Task Force set up by the Schools Authority to look at this problem be regarded as the ongoing body responsible for the urgent identification of schools and teachers affected by enrolment declines. The Task Force would need to become a longer term advisory committee charged with the responsibility of going beyond the development of guidelines and principles for the management of contraction, to the actual planning and co-ordination of the contraction process with specific schools, and their staff and Boards. Successful management of the contraction process depends upon the amount of the lead time available, the effectiveness of schemes to sustain teacher morale during the contraction process, and the extent to which school communities can be prepared to accept the inevitability of contraction. However, before school

closures or school amalgamations are judged as a necessary feature of the contraction process, the Schools Authority should first establish a set of clear criteria upon which those steps might be based. In addition to a thorough going monetary cost/benefit analysis of each case in those categories the Schools Authority should also undertake a social cost/benefit study of the effects of school closures and amalgamations upon students, the local communities and teacher effectiveness.

APPENDIX 1

EXAMPLE OF POSSIBLE LONG-TERM PROFESSIONAL DEVELOPMENT AND RENEWAL PROGRAM FOR FULL-TIME TEACHERS

Phase	Period	Type of Activity
During first 5 years of teaching	Informal short courses	One week every year visit other schools in Authority as part of curriculum development skill. Attend one-day conferences at least once each year - teaching and planning skills. Attend one vacation course during period.
	Medium term course	Two hours per week for one term during first five years for content development in teachers specialization or area of curriculum.
At end of 5 years of teaching service	Short course	Two week workshop, an introduction to school administration. Preparation for administrative responsibilities.
During first 10 years of teaching	Informal non-award	One 3-day conference each year on school/community relationships OR curriculum development.
	Formal award course	Post-graduate specialist course 1 or 2 years part-time in area of curriculum specialization or curriculum or administration. OR Upgrade to Bachelors degree qualification if not already held.
At end of 10 years of teaching	Medium term program	Either international or interstate exchange or leave for minimum of three months.

Phase	Period	Type of Activity
During 10 years to 20 years teaching	Short course	Attend at least one 3-day conference each year in area of teaching specialization. Annual attendance at National Conferences on Education. Community Liaison Program one week every second year. Administration or Curriculum Vacation Workshop every three years.
At end of 20 years teaching	Medium Term Program	Overseas/interstate exchange or leave for a minimum of 6 months.
During 20 years to 30 years of teaching	Medium courses	Formal part-time or full-time study leave to renew knowledge in basic curriculum subject or curriculum specialization - minimum six months of single unit studies.
	Short courses	Community Liaison Program one day per week for a term, every three years. Annual attendance at National Professional Education Conference. Administration and Curriculum Development Workshop - one week minimum each year.
	Medium term	Exchange with either interstate/T.A.F.E/Adult or continuing education institution for at least one term during period. Opportunity to undertake higher degree in either Administration or Curriculum area.

APPENDIX 2

Example of Data Sheet that might be used to record information about teachers upon their initial appointment to the A.C.T. Schools Authority (for all teachers - Permanent, Temporary, Part-time).

Name . . . . . .

Date of Birth . . . . . .

Previous Employment . . . . . .

Qualifications:

2 Year Diploma . . . From . . . . . .

3 Year Diploma . . . From . . . . . .

Degree/Post-Graduate Qualifications . . . From . . . . . .

Date of Initial Appointment to A.C.T. Schools . . . .

School to which initially appointed in A.C.T. . . . .

Band Level of initial appointment to A.C.T. . . . .

Salary Level of initial appointment to A.C.T. . . . .

If Appointee is a Re-entrant, when did he/she previously resign from the A.C.T. Schools Authority? . . . . .

APPENDIX 3

STATISTICS

TABLE A

1981 FEBRUARY CENSUS OF TEACHERS

	TOTAL TEACHERS					
	Full-time		Part-time		Total	
	Perm.	Temp.	No.	FTE.	No.	FTE.
Primary	1,047	84	64	28.6	1,195	1,159.60
High Schools	750	78	9	3.6	837	831.60
Colleges	350	40	8	3.25	398	393.25
Special Schools	50	8	7	2.8	65	60.80
TOTAL	2,197	210	88	38.25	2,495	2,445.25

Note: Some schools may have included counsellors.

TABLE B

1981 FEBRUARY CENSUS OF TEACHERS

	MALES					
	Full-time		Part-time		Total	
	Perm.	Temp.	No.	FTE	No.	FTE
Primary	268	4	8	2.95	280	274.95
High Schools	379	27	-	-	406	406.00
Colleges	195	17	2	1.00	214	213.00
Special Schools	12	2	-	-	14	14.00
TOTAL	854	50	10	3.95	914	907.95

TABLE C

1981 FEBRUARY CENSUS OF TEACHERS

	FEMALES					
	Full-time		Part-time		Total	
	Perm.	Temp.	No.	FTE	No.	FTE
Primary	779	80	56	25.65	915	884.65
High Schools	371	51	9	3.60	431	425.60
Colleges	155	23	6	2.25	184	180.25
Special Schools	38	6	7	2.80	51	46.80
TOTAL	1,343	160	78	34.30	1,581	1,537.30

TABLE D

COMPOSITION OF PRIMARY TEACHER STOCK

Year	Male		Female		Totals		Total	FTE
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time		
1976[a]	267	1	871	81	1,138	82	1,220	1,170
1977[a]	288	-	920	88	1,208	88	1,296	1,237
1978[a]	289	1	954	79	1,243	80	1,323	1,270
1979[a]	285	-	934	78	1,219	78	1,297	1,250
1980[b]	275	7	878	133	1,153	140	1,293	1,211.2
1981[c]	272	8	859	56	1,131	64	1,195	1,159.6

Sources: (a) A.B.S., Schools, 1976-1979.
(b) Figures provided to A.B.S. by Schools Authority, August 1980. (Excludes special schools.)
(c) February 1981 Staff Census Sheets. (Excludes special schools).

TABLE E

COMPOSITION OF SECONDARY TEACHER STOCK

Year	Male		Female		Totals		Total	FTE.
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time		
1976[a]	545	-	585	21	1,130	21	1,151	1,142
1977[a]	579	-	614	21	1,193	21	1,214	1,204
1978[a]	606	-	629	21	1,235	21	1,256	1,245
1979[a]	618	2	617	24	1,235	26	1,261	1,247
1980[b]	609	6	616	44	1,225	50	1,275	1,249.7
1981[c]	618	2	600	15	1,218	17	1,235	1,224.85

Sources: (a) A.B.S. Schools, 1976-1979.
(b) Figures provided to A.B.S., August, 1980.
(c) Compiled from 1981 February Census Sheets.

TABLE F

AGE PROFILE OF TEACHER STOCK - MALE/FEMALE

Age Group	Male	Female	Total
20-29 Years	125	376	501
30-39 Years	521	846	1,367
40-49 Years	230	481	711
50-59 Years	95	141	236
Over 60 Years	9	11	20
Age Unknown	7	39	46
TOTAL	987	1,894	2,881

TABLE G

A.C.T. FULL-TIME TEACHERS - APRIL 1981

	Primary		Secondary	
	Male	Female	Male	Female
20-29 Years	31	175	91	144
30-39 Years	134	357	360	293
40-49 Years	73	294	154	156
50-59 Years	38	82	54	49
Over 60 Years	2	10	6	1
Age Unknown	-	25	7	14
TOTAL	278	943	672	657

Source: Pay Advice Records.
Note: Excludes full-time teachers on leave.

TABLE H

AGE PROFILE OF TEACHER STOCK - PRIMARY AND SECONDARY

(Full-time Teachers)

Age Group	Primary	Secondary	Total
20-29 Years	206	235	441
30-39 Years	491	653	1,144
40-49 Years	367	310	677
50-59 Years	120	103	223
Over 60 Years	12	7	19
Age Unknown	25	21	46
On Leave			331
TOTAL			2,881